

**REMARKS**

Claims 1, 3, 8, 10, 12, 21-23 and 25-32 have been examined on their merits.

Claims 2, 4-7, 11, 13, 15, 17 and 19 are withdrawn from consideration.

Applicants herein amend claims 1 and 21 to recite an additional electrical relationship between the electrostatic protection element and the MOS capacitor. Applicants also amend claims 10 and 25 to conform to the amendments of claims 1 and 21.

Claims 1-8, 10-13, 15, 17, 19, 21-23 and 25-32 are all the claims presently pending in the application.

1. Claims 1, 3, 8, 10, 12, 21-23 and 25-32 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Furuya (JP Heisei 11-154733) in view of Merritt (U.S. Patent No. 5,828,095). Applicant traverses the rejection of claims 1, 3, 8, 10, 12, 21-23 and 25-32 for at least the reasons set forth below.

The combination of Furuya and Merritt lacks any teaching or suggestion of protecting a semiconductor device from electrostatic breakdown due to discharge of electric charge according to a charged device model wherein the equation  $V_C + R_2 \cdot i < V_{OX}$  is satisfied.<sup>1</sup> Although the Patent Office argues that that Furuya protects the internal circuits from an ESD breakdown regardless of the source of the electrical charge, Furuya fails to teach or suggest the electrical relationships recited in claims 1 and 21. Specifically, there is no teaching or suggestion in the

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<sup>1</sup> See claims 1 and 21 for the definitions of the various elements of the equation claimed therein.

combination of Furuya and Merritt of the various relationships between  $R_1$ ,  $R_2$ ,  $V_C$  and  $V_{OX}$  as recited in claims 1 and 21 of the instant application. As discussed at length in the Rule 116 Amendment filed on September 23, 2004, there is no teaching or suggestion of the  $R_1/R_2$  relationship taught or suggested in the combination of Furuya and Merritt. Furthermore, there is no teaching or suggestion in the combination of Furuya and Merritt that the sum of the ESD clamp voltage and the voltage drop across the ground wire is less than the dielectric breakdown voltage of the MOS capacitor. Thus, the combination of Furuya and Merritt fails to teach or suggest electrostatic breakdown protection as recited in claims 1 and 21 of the instant application.

Furthermore, the combination of Furuya and Merritt fails to teach or suggest that the wire resistance of a ground wire portion between an electrostatic protection element and a ground terminal is larger than a wire resistance of the ground wire portion between the electrostatic protection element and a MOS capacitor, as recited in independent claims 1 and 21. Applicant's arguments with respect to Furuya and Merritt's lack of teaching with respect to this feature of claims 1 and 21 have been thoroughly discussed in the Rule 116 Amendment filed on September 23, 2004. In the interest of brevity, Applicant incorporates herein those arguments as they are set forth in the September 23, 2004 Rule 116 Amendment.

Thus, since the Patent Office is improperly relying on Furuya and Merritt to reject the recited elements of claims 1 and 21, Applicant submits that the "all limitations" prong of a *prima facie* case of obviousness has not been satisfied as required by *In re Vaeck*, 20 U.S.P.Q.2d 1438, 1442 (Fed. Cir. 1991). Applicant submits that independent claims 1 and 21 are allowable over the

combination of Furuya and Merritt, and Applicant further submits that claims 3, 8, 10, 12, 22, 23 and 25-32 are allowable as well, at least by virtue of their dependency from claims 1 and 21, respectively.

Since *Nystrom v. Trex Co.*, 71 U.S.P.Q.2d 1241 (Fed. Cir. 2004), *Hockerson-Halberstadt, Inc. v. Avia Group Int'l*, 222 F.3d 951, 956 (Fed. Cir. 2000) and *In re Wright*, 569 F.2d 1124, 1127 (C.C.P.A 1977) foreclose the Patent Office from relying upon Figure 6 of Furuya, motivation to Furuya and Merritt is lacking as well. *In re Dembiczak*, 175 F.3d 994, 999 (Fed. Cir. 1999) and *In re Zurko*, 258 F.3d 1379, 1386 (Fed. Cir. 2001) require the Patent Office to provide particularized facts on the record as to why one of skill would be motivated to modify Furuya with a MOS capacitor. Here, motivation is completely lacking with respect to the combination of Furuya and Merritt, since neither Furuya nor Merritt can be properly relied upon to support the obviousness rejection (*See* above discussion with respect to the “all limitations” prong of a *prima facie* case of obviousness). Without a reference to modify, the motivation prong of a *prima facie* case of obviousness cannot be fulfilled, as required by *In re Dembiczak* and *In re Zurko*.

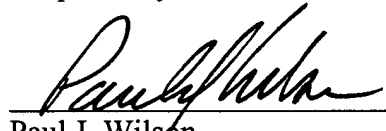
Thus, since the motivation prong of a *prima facie* case of obviousness has not been satisfied, Applicant submits that independent claims 1 and 21 are allowable over the combination of Furuya and Merritt, and Applicant further submits that claims 3, 8, 10, 12, 22, 23 and 25-32 are allowable as well, at least by virtue of their dependency from claims 1 and 21, respectively.

AMENDMENT UNDER 37 C.F.R. § 1.111  
U.S. APPLICATION NO. 09/615,705  
ATTORNEY DOCKET NO. Q60098

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

  
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